## **ABSTRACT**

The invention relates to a biocompatible polymer having general formula (I) AaXxYy, wherein: A denotes a monomer; X denotes an RCOOR' group; Y denotes an O or N-sulphonate group which is fixed to A and which has either formula -ROS03R' or -RNS03R' in which R denotes an optionally branched and/or unsaturated aliphatic hydrocarbon chain which can contain one or more aromatic rings and R' denotes a hydrogen atom or a cation; a denotes the number of monomers; x denotes the rate of substitution of the A monomers by the X groups; and y denotes the rate of substitution of the A monomers by the Y groups. More specifically, the invention relates to the use of said biocompatible polymers for the preparation of a pharmaceutical, dermatological or cosmetic composition or a medical device, which are intended to prevent, relieve and/or treat discomfort, distress, itches, irritations and/or pain and/or to protect tissues against same. In addition, in certain cases, the use of said biocompatible polymers for pain treatment can impact on the actual curing of certain diseases. Significant improvements and even cures have been observed in relation to chronic and painful diseases that are associated with alterations in the extracellular matrix regardless of the origin thereof.